





# MOQ-05-05 Total Acreage: 19.2 Acres







75

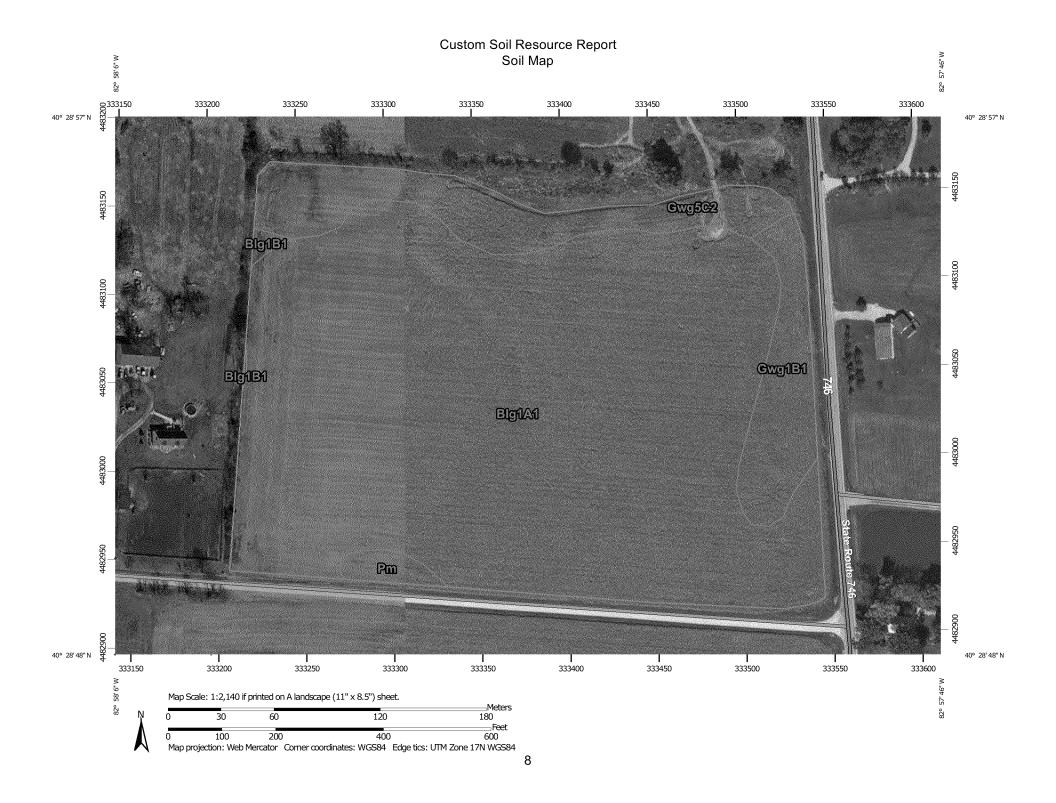
150

300 Feet

# MOQ-05-05 Total Acreage: 19.2 Acres







#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

#### **Special Point Features**

(0) Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot \*\*

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area





Wet Spot

Other Δ

Special Line Features

#### **Water Features**

Streams and Canals

#### Transportation

Rails ---

Interstate Highways

**US Routes** 

Major Roads gattaggi

Local Roads

#### Background

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 5, 2011—Mar 10, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

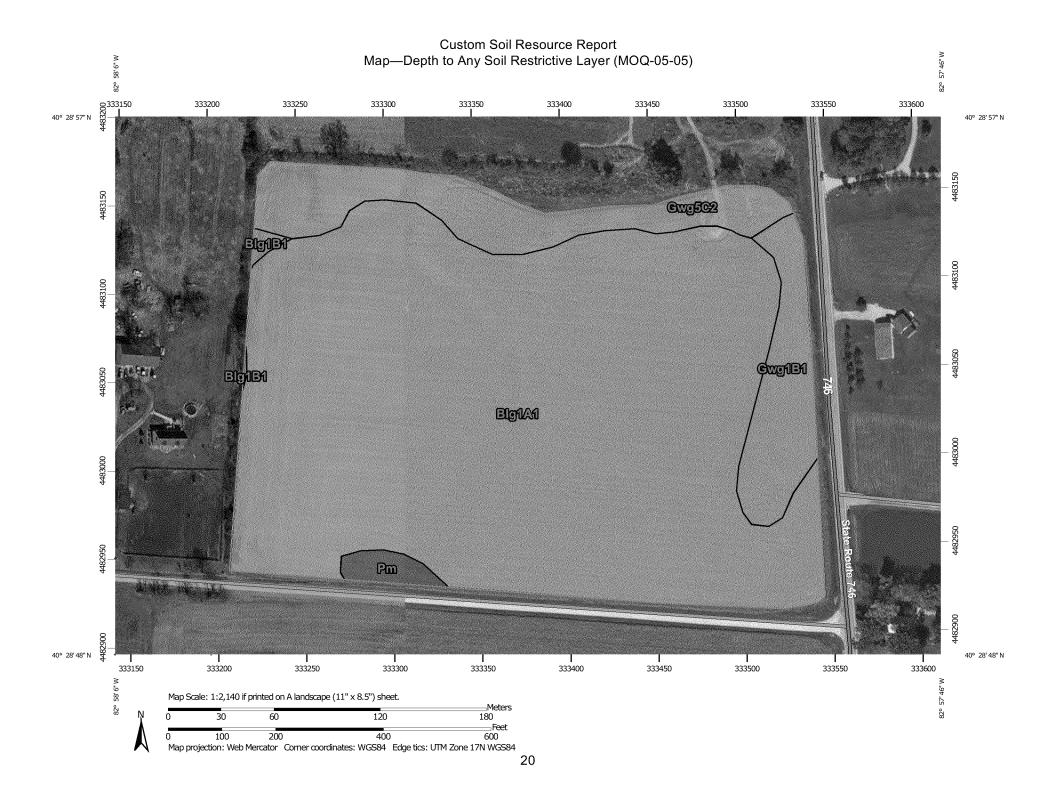
Morrow County, Ohio (OH117)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	15.1	82.1%		
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	0.1	0.3%		
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	1.2	6.3%		
Gwg5C2 Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded		1.9	10.1%		
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	0.2	1.1%		
Totals for Area of Interest		18.4	100.0%		

# **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially



Not rated or not available

Streams and Canals

Interstate Highways

Aerial Photography

#### MAP LEGEND

**Water Features** 

Transportation

Background

Rails

**US Routes** 

Major Roads

Local Roads

+++

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

#### Soil Rating Polygons

0 - 25

25 - 50

50 - 100

150 - 200

100 - 150

> 200

Not rated or not available

#### Soil Rating Lines

0 - 25

25 - 50

50 - 100

-

100 - 150

150 - 200

> 20

Not rated or not available

#### Soil Rating Points

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 200

#### MAP INFORMATION

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 5, 2011—Mar 10, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Table—Depth to Any Soil Restrictive Layer (MOQ-05-05)

Depth	to Any Soil Restrictive Laye	er— Summary by Map Unit -	— Morrow County, Onio (C	(OH117)
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	99	15.1	82.1%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	94	0.1	0.3%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	86	1.2	6.3%
Gwg5C2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	74	1.9	10.1%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	>200	0.2	1.1%
Totals for Area of Interest		18.4	100.0%	

## Rating Options—Depth to Any Soil Restrictive Layer (MOQ-05-05)

Units of Measure: centimeters

Aggregation Method: Dominant Component Component Percent Cutoff: None Specified

Tie-break Rule: Lower
Interpret Nulls as Zero: No

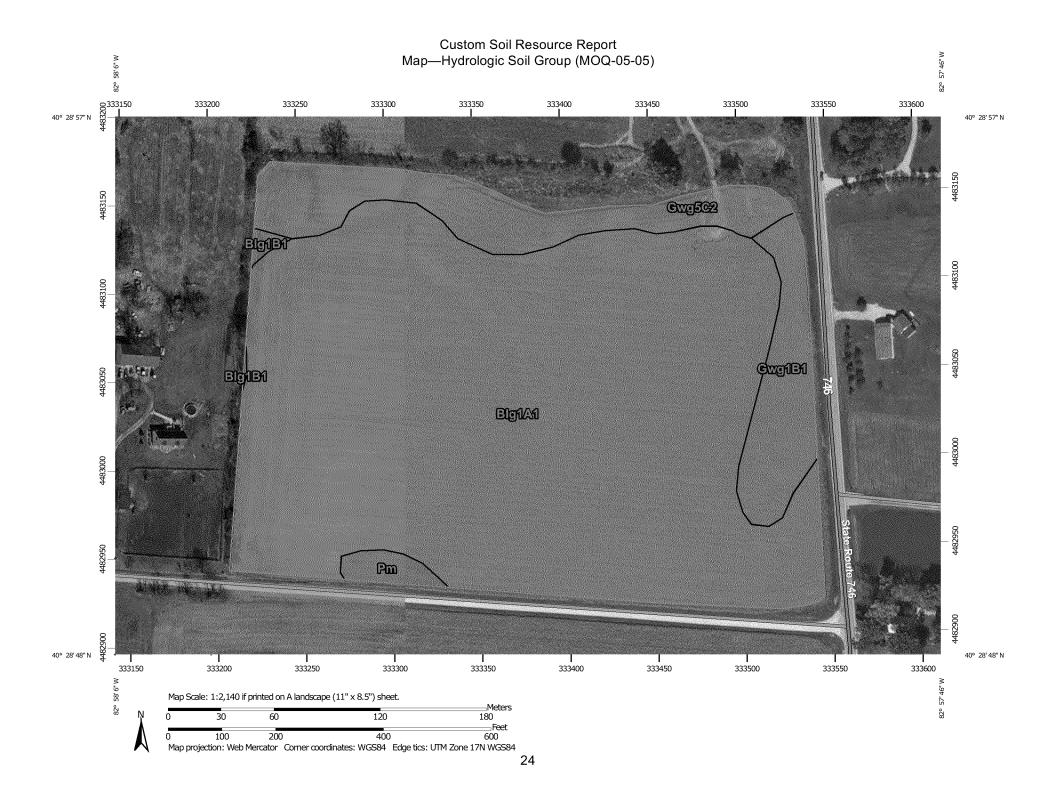
# **Hydrologic Soil Group (MOQ-05-05)**

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that



#### MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at 1:15,800. Area of Interest (AOI) С Area of Interest (AOI) C/D Warning: Soil Map may not be valid at this scale. Soils D Soil Rating Polygons Not rated or not available Enlargement of maps beyond the scale of mapping can cause Α misunderstanding of the detail of mapping and accuracy of soil line **Water Features** A/D placement. The maps do not show the small areas of contrasting Streams and Canals soils that could have been shown at a more detailed scale. В Transportation B/D Rails بنين Please rely on the bar scale on each map sheet for map C measurements. Interstate Highways C/D **US Routes** ALC: UNK Source of Map: Natural Resources Conservation Service D Major Roads Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov ganggi Coordinate System: Web Mercator (EPSG:3857) Not rated or not available Local Roads grandi Soil Rating Lines Background Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Aerial Photography distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015 Not rated or not available Soil map units are labeled (as space allows) for map scales 1:50,000 Soil Rating Points or larger. Α A/D Date(s) aerial images were photographed: Oct 5, 2011—Mar 10, 2012 В B/D The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## **Table—Hydrologic Soil Group (MOQ-05-05)**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	D	15.1	82.1%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	D	0.1	0.3%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	D	1.2	6.3%
Gwg5C2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	D	1.9	10.1%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	C/D	0.2	1.1%
Totals for Area of Inter	est	1	18.4	100.0%

# Rating Options—Hydrologic Soil Group (MOQ-05-05)

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

Tie-break Rule: Higher



# MOQ-05-06 Total Acreage: 42.5 Acres







150

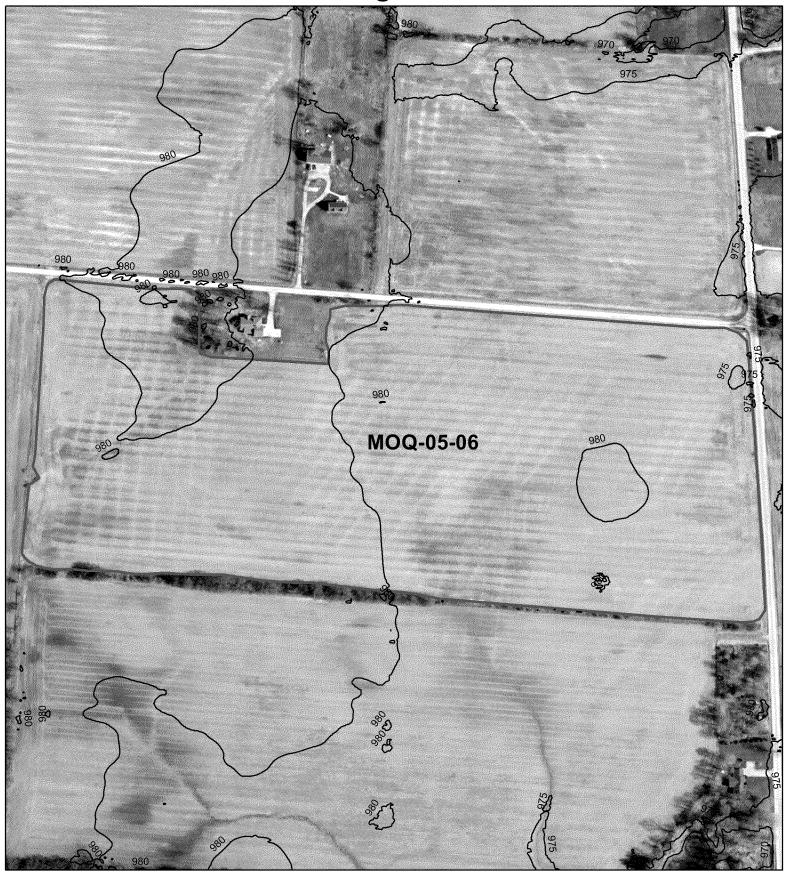
0

300

600 Feet

# MOQ-05-06 Total Acreage: 42.5 Acres







#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

#### **Special Point Features**

(0) Blowout



Clay Spot



Gravel Pit

Gravelly Spot \*\*

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

#### **Water Features**

Streams and Canals

#### Transportation

Rails ---



Interstate Highways



**US Routes** 



Major Roads Local Roads

#### Background



Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 5, 2011—Mar 10, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

Morrow County, Ohio (OH117)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	17.4	40.8%		
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	0.0	0.0%		
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	9.5	22.4%		
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	15.7	36.9%		
Totals for Area of Interest		42.6	100.0%		

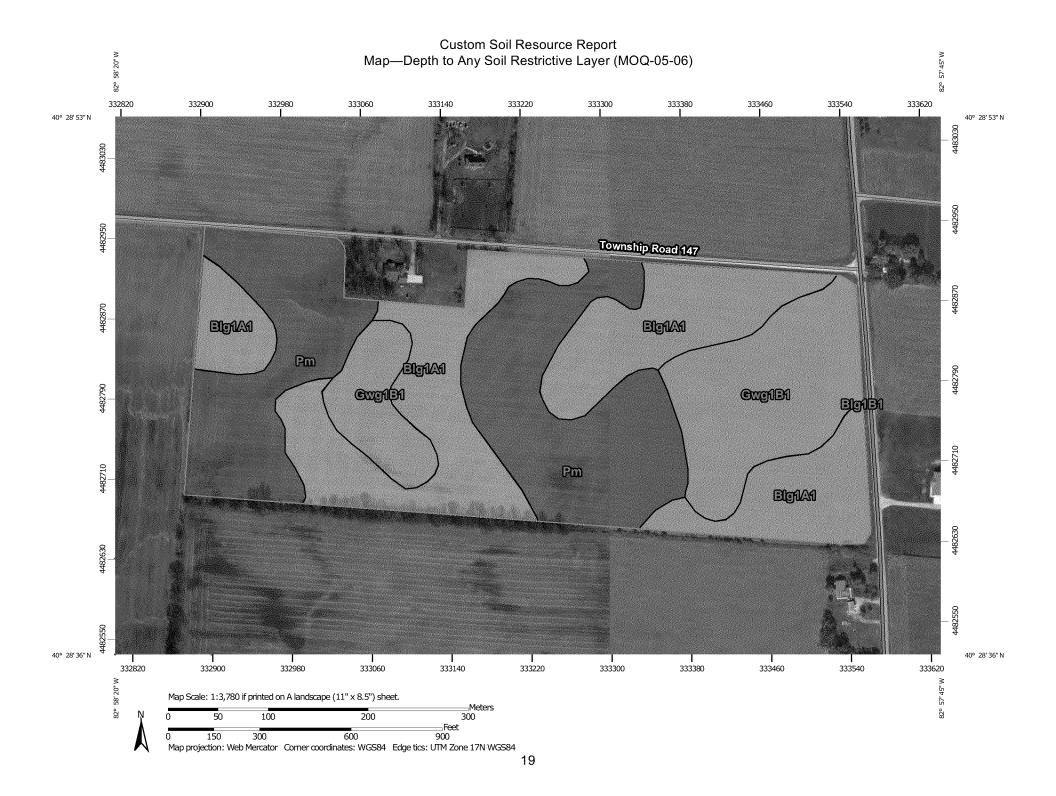
# **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic



Not rated or not available

Streams and Canals

Interstate Highways

Aerial Photography

#### MAP LEGEND

**Water Features** 

Transportation

Background

Rails

**US Routes** 

Major Roads

Local Roads

+++

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

#### Soil Rating Polygons

- 0 25
- 25 50
- 100 150

50 - 100

- 150 200
- > 200
- Not rated or not available

#### Soil Rating Lines

- 0 25
- 25 50
- 50 100
- 100 150
- 150 200
- > 200
- Not rated or not available

#### Soil Rating Points

- 0 25
- 25 50
- 50 100
- 100 150
- 150 200
- > 200

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio
Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 5, 2011—Mar 10, 2012

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## Table—Depth to Any Soil Restrictive Layer (MOQ-05-06)

Depth to Any Soil Restrictive Layer— Summary by Map Unit — Morrow County, Ohio (OH117)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	99	17.4	40.8%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	94	0.0	0.0%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	86	9.5	22.4%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	>200	15.7	36.9%
Totals for Area of Inter	est		42.6	100.0%

## Rating Options—Depth to Any Soil Restrictive Layer (MOQ-05-06)

Units of Measure: centimeters

Aggregation Method: Dominant Component Component Percent Cutoff: None Specified

Tie-break Rule: Lower Interpret Nulls as Zero: No

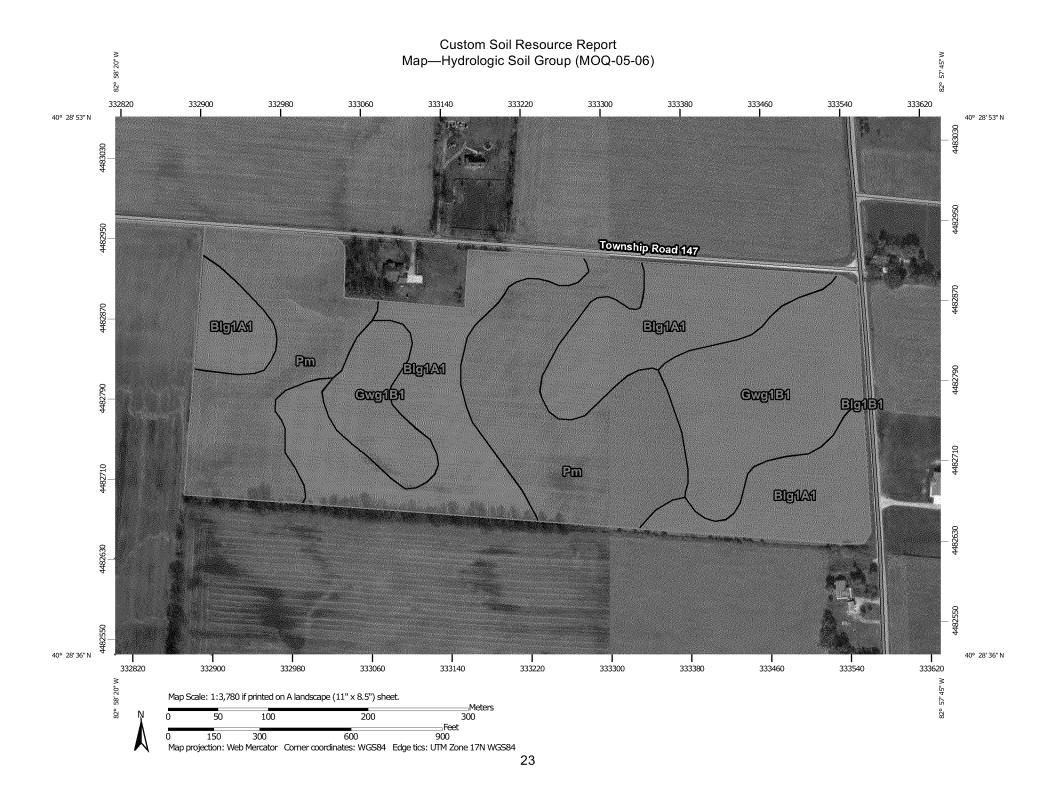
# **Hydrologic Soil Group (MOQ-05-06)**

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.



#### MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at 1:15,800. Area of Interest (AOI) С Area of Interest (AOI) C/D Warning: Soil Map may not be valid at this scale. Soils D Soil Rating Polygons Not rated or not available Enlargement of maps beyond the scale of mapping can cause Α misunderstanding of the detail of mapping and accuracy of soil line **Water Features** A/D placement. The maps do not show the small areas of contrasting Streams and Canals soils that could have been shown at a more detailed scale. В Transportation B/D Rails بنين Please rely on the bar scale on each map sheet for map C measurements. Interstate Highways C/D **US Routes** ALC: UNK Source of Map: Natural Resources Conservation Service D Major Roads Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov ganggi Coordinate System: Web Mercator (EPSG:3857) Not rated or not available Local Roads grandi Soil Rating Lines Background Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Aerial Photography distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015 Not rated or not available Soil map units are labeled (as space allows) for map scales 1:50,000 Soil Rating Points or larger. Α A/D Date(s) aerial images were photographed: Oct 5, 2011—Mar 10, 2012 В B/D The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# **Table—Hydrologic Soil Group (MOQ-05-06)**

Hydrologic Soil Group— Summary by Map Unit — Morrow County, Ohio (OH117)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	D	17.4	40.8%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	D	0.0	0.0%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	D	9.5	22.4%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	C/D	15.7	36.9%
Totals for Area of Inter	est		42.6	100.0%

# Rating Options—Hydrologic Soil Group (MOQ-05-06)

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

Tie-break Rule: Higher



150 300

600 Feet

# MOQ-05-07 Total Acreage: 49.9 Acres





Waterways

33ft Water Buffer

100ft Res Buffer

300ft Res Buffer



300

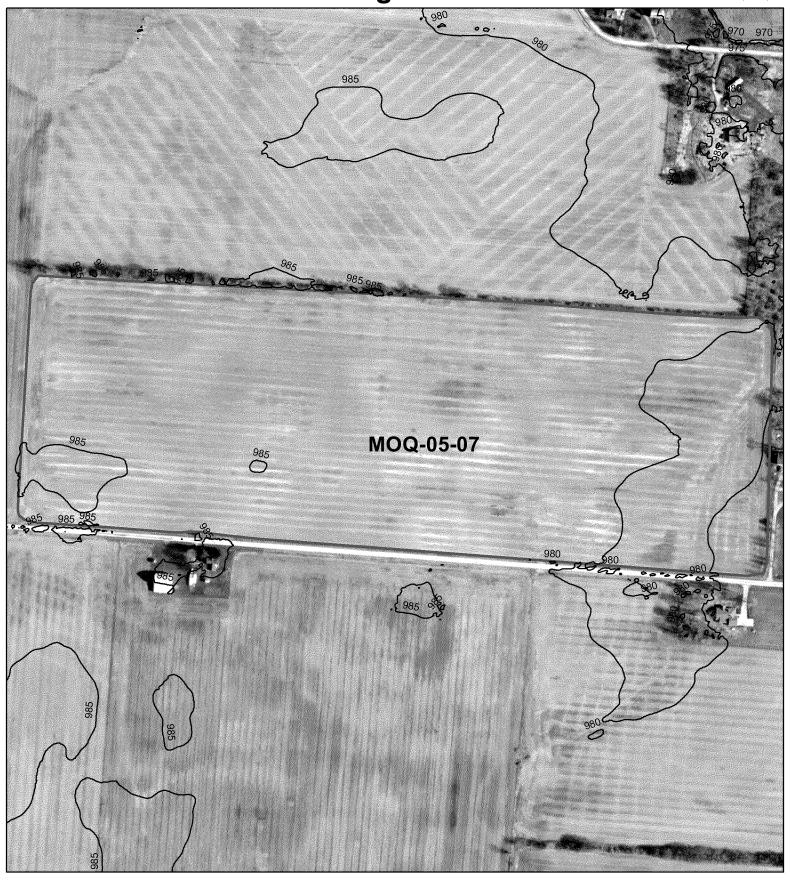
150

0

600 Feet

# MOQ-05-07 Total Acreage: 49.9 Acres





— 5ft Contours



#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

#### **Special Point Features**

(0) Blowout



Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot \*\*

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

#### **Water Features**

Streams and Canals

#### Transportation

Rails ---



Interstate Highways



**US Routes** 



Major Roads Local Roads

#### Background

Aerial Photography

#### MAP INFORMATION

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Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012

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# Map Unit Legend

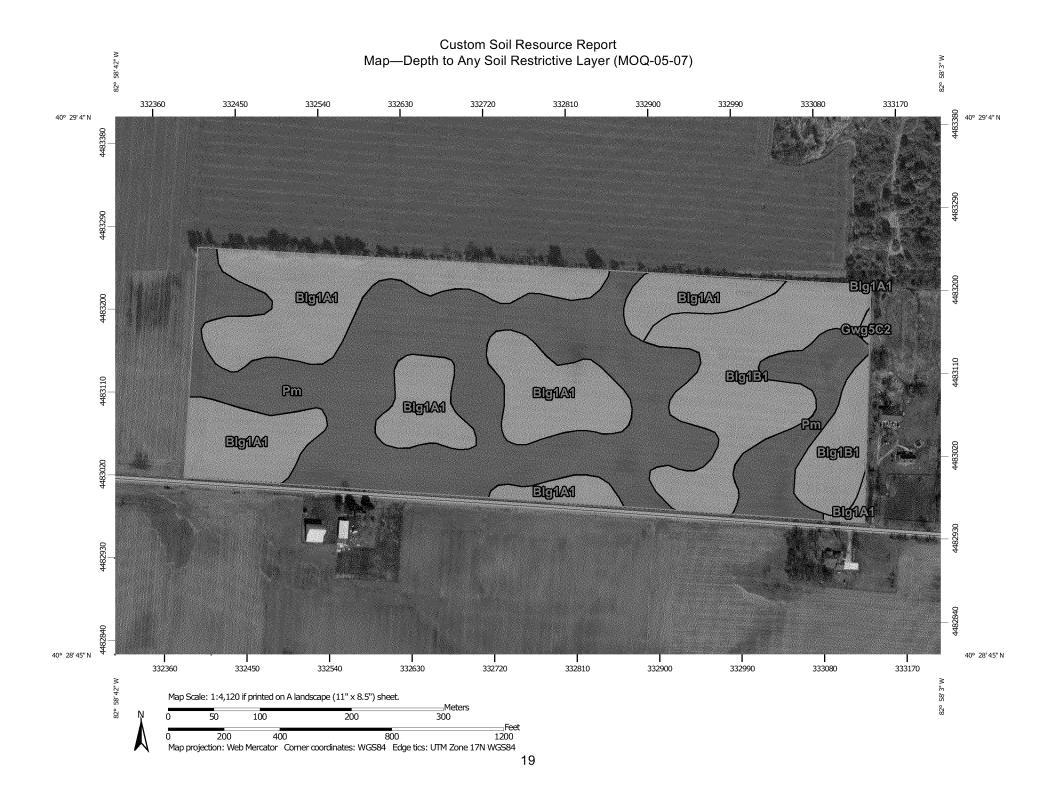
Morrow County, Ohio (OH117)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	16.4	35.2%		
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	8.9	19.0%		
Gwg5C2 Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded		0.1	0.1%		
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	21.3	45.7%		
Totals for Area of Interest		46.7	100.0%		

# **Map Unit Descriptions**

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A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.



Not rated or not available

Streams and Canals

Interstate Highways

Aerial Photography

#### MAP LEGEND

**Water Features** 

Transportation

Background

Rails

**US Routes** 

Major Roads

Local Roads

+++

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

#### Soil Rating Polygons

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 200

Not rated or not available

#### Soil Rating Lines

0 - 25

25 - 50

50 - 100

\_

100 - 150

150 - 200

> 20

Not rated or not available

#### Soil Rating Points

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 200

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Table—Depth to Any Soil Restrictive Layer (MOQ-05-07)

Depth	to Any Soil Restrictive Laye	— Morrow County, Ohio (	OH117)	
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	99	16.4	35.2%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	94	8.9	19.0%
Gwg5C2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	74	0.1	0.1%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	>200	21.3	45.7%
Totals for Area of Inter	est		46.7	100.0%

## Rating Options—Depth to Any Soil Restrictive Layer (MOQ-05-07)

Units of Measure: centimeters

Aggregation Method: Dominant Component Component Percent Cutoff: None Specified

Tie-break Rule: Lower Interpret Nulls as Zero: No

# **Hydrologic Soil Group (MOQ-05-07)**

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.



#### MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at 1:15,800. Area of Interest (AOI) С Area of Interest (AOI) C/D Warning: Soil Map may not be valid at this scale. Soils D Soil Rating Polygons Not rated or not available Enlargement of maps beyond the scale of mapping can cause Α misunderstanding of the detail of mapping and accuracy of soil line **Water Features** A/D placement. The maps do not show the small areas of contrasting Streams and Canals soils that could have been shown at a more detailed scale. В Transportation B/D Rails بنين Please rely on the bar scale on each map sheet for map C measurements. Interstate Highways C/D **US Routes** dilling the Source of Map: Natural Resources Conservation Service D Major Roads Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov ganggi Coordinate System: Web Mercator (EPSG:3857) Not rated or not available Local Roads grandi Soil Rating Lines Background Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Aerial Photography distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015 Not rated or not available Soil map units are labeled (as space allows) for map scales 1:50,000 Soil Rating Points or larger. Α A/D Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012 В B/D The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# **Table—Hydrologic Soil Group (MOQ-05-07)**

Hydrologic Soil Group— Summary by Map Unit — Morrow County, Ohio (OH117)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	D	16.4	35.2%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	D	8.9	19.0%
Gwg5C2	Glynwood clay loam, ground moraine, 6 to 12 percent slopes, eroded	D	0.1	0.1%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	C/D	21.3	45.7%
Totals for Area of Inter	est		46.7	100.0%

# Rating Options—Hydrologic Soil Group (MOQ-05-07)

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

Tie-break Rule: Higher



# MOQ-05-08 Total Acreage: 37.9 Acres







150

0

300

600 Feet

MOQ-05-08 Total Acreage: 37.9 Acres







#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

#### **Special Point Features**

Blowout



Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot
Sandy Spot

Severely Eroded Spot

Sinkhole

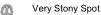
Slide or Slip

Sodic Spot

#### \_\_\_\_\_

Spoil Area







Wet Spot Other



Special Line Features

#### **Water Features**

Streams and Canals

#### Transportation

Rails



Interstate Highways

US Routes

garaga

Major Roads Local Roads

#### Background

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## **Map Unit Legend**

Morrow County, Ohio (OH117)				
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI	
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	14.1	37.0%	
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	24.0	63.0%	
Totals for Area of Interest		38.1	100.0%	

## **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If



Not rated or not available

Streams and Canals

Interstate Highways

Aerial Photography

#### MAP LEGEND

**Water Features** 

Transportation

Background

Rails

**US Routes** 

Major Roads

Local Roads

+++

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

#### Soil Rating Polygons

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 200

Not rated or not available

#### Soil Rating Lines

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 20

Not rated or not available

#### Soil Rating Points

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 200

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

### Table—Depth to Any Soil Restrictive Layer (MOQ-05-08)

Depth to Any Soil Restrictive Layer— Summary by Map Unit — Morrow County, Ohio (OH117)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	99	14.1	37.0%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	>200	24.0	63.0%
Totals for Area of Inter	est		38.1	100.0%

### Rating Options—Depth to Any Soil Restrictive Layer (MOQ-05-08)

Units of Measure: centimeters

Aggregation Method: Dominant Component Component Percent Cutoff: None Specified

Tie-break Rule: Lower Interpret Nulls as Zero: No

### **Hydrologic Soil Group (MOQ-05-08)**

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.



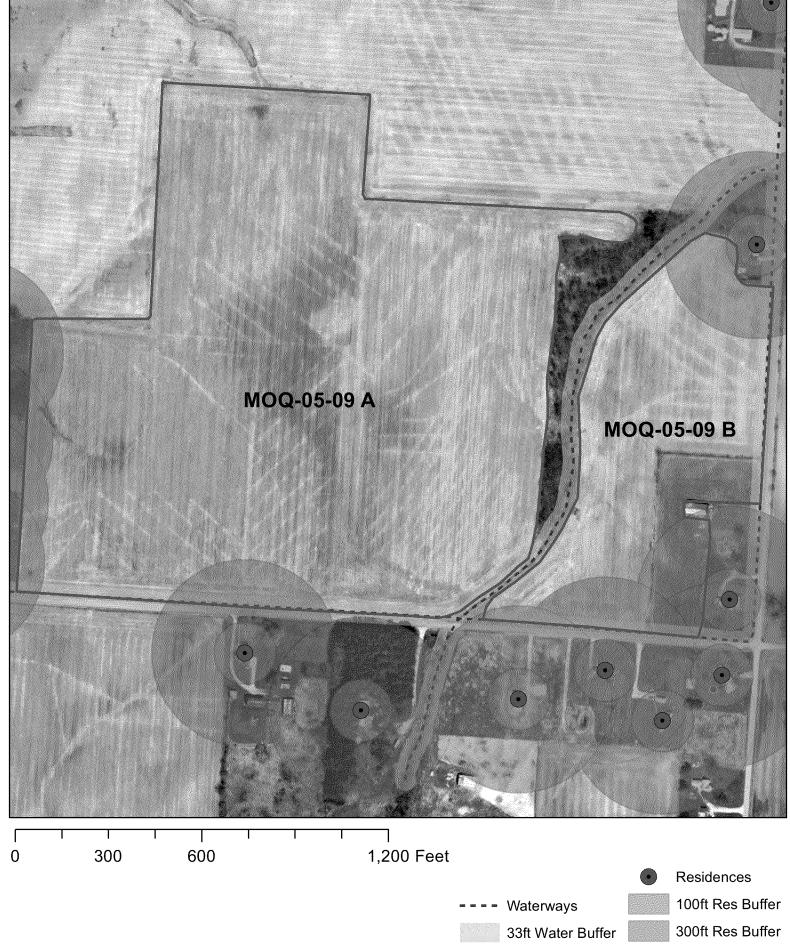
#### MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at 1:15,800. Area of Interest (AOI) С Area of Interest (AOI) C/D Warning: Soil Map may not be valid at this scale. Soils D Soil Rating Polygons Not rated or not available Enlargement of maps beyond the scale of mapping can cause Α misunderstanding of the detail of mapping and accuracy of soil line **Water Features** A/D placement. The maps do not show the small areas of contrasting Streams and Canals soils that could have been shown at a more detailed scale. В Transportation B/D Rails بنين Please rely on the bar scale on each map sheet for map C measurements. Interstate Highways C/D **US Routes** dilling the Source of Map: Natural Resources Conservation Service D Major Roads Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov ganggi Coordinate System: Web Mercator (EPSG:3857) Not rated or not available Local Roads grandi Soil Rating Lines Background Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Aerial Photography distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015 Not rated or not available Soil map units are labeled (as space allows) for map scales 1:50,000 Soil Rating Points or larger. Α A/D Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012 В B/D The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.





# MOQ-05-09 Total Acreage: 67.2 Acres

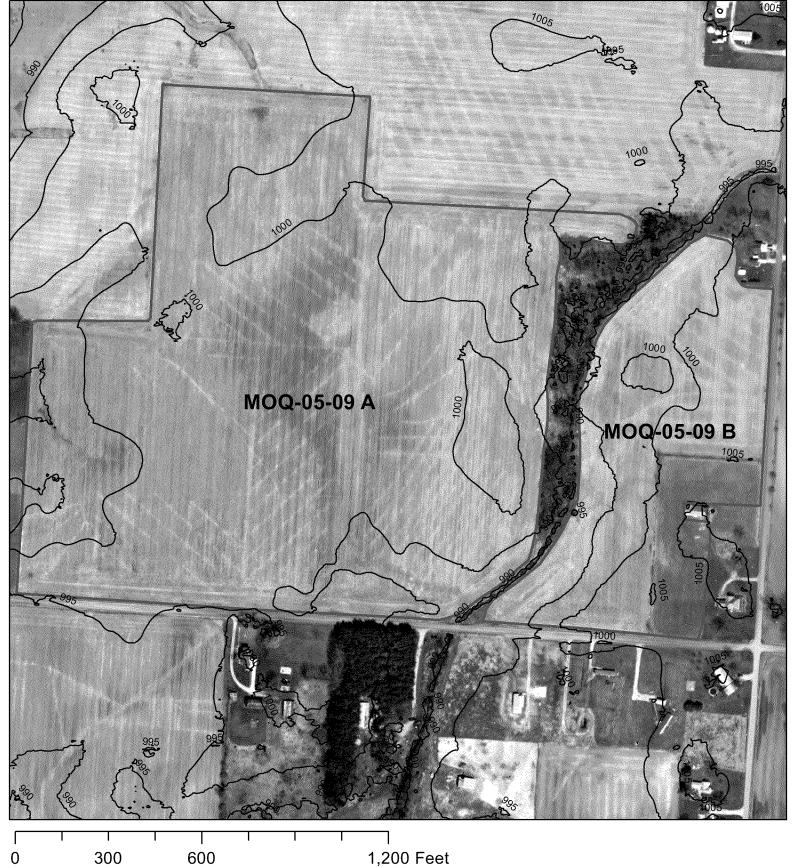






MOQ-05-09 Total Acreage: 67.2 Acres







#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Lines



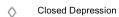
Soil Map Unit Points

#### Special Point Features

Blowout



Clay Spot



Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area



Very Stony Spot



Wet Spot Other

Stony Spot



Special Line Features

#### **Water Features**

Streams and Canals

#### Transportation

Rails



Interstate Highways

US Routes

general

Major Roads Local Roads

#### Background

4

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

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Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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## Map Unit Legend

Morrow County, Ohio (OH117)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	22.8	44.0%		
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	13.8	26.6%		
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	5.7	11.1%		
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	9.4	18.1%		
So	Sloan silty clay loam, sandy substratum, occasionally flooded	0.1	0.2%		
Totals for Area of Interest	·	51.9	100.0%		

## **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially



Not rated or not available

Streams and Canals

Interstate Highways

Aerial Photography

#### MAP LEGEND

**Water Features** 

Transportation

Background

Rails

**US Routes** 

Major Roads

Local Roads

+++

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

#### Soil Rating Polygons

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 200

Not rated or not available

#### Soil Rating Lines

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 20

Not rated or not available

#### Soil Rating Points

0 - 25

25 - 50

50 - 100

100 - 150

150 - 200

> 200

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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#### Table—Depth to Any Soil Restrictive Layer (MOQ-05-09 A)

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	99	22.8	44.0%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	94	13.8	26.6%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	86	5.7	11.1%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	>200	9.4	18.1%
So	Sloan silty clay loam, sandy substratum, occasionally flooded	>200	0.1	0.2%
Totals for Area of Interest		51.9	100.0%	

# Rating Options—Depth to Any Soil Restrictive Layer (MOQ-05-09 A)

Units of Measure: centimeters

Aggregation Method: Dominant Component Component Percent Cutoff: None Specified

Tie-break Rule: Lower Interpret Nulls as Zero: No

## Hydrologic Soil Group (MOQ-05-09 A)

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that



#### MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at 1:15,800. Area of Interest (AOI) С Area of Interest (AOI) C/D Warning: Soil Map may not be valid at this scale. Soils D Soil Rating Polygons Not rated or not available Enlargement of maps beyond the scale of mapping can cause Α misunderstanding of the detail of mapping and accuracy of soil line **Water Features** A/D placement. The maps do not show the small areas of contrasting Streams and Canals soils that could have been shown at a more detailed scale. В Transportation B/D Rails بنين Please rely on the bar scale on each map sheet for map C measurements. Interstate Highways C/D **US Routes** dilling the Source of Map: Natural Resources Conservation Service D Major Roads Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov ganggi Coordinate System: Web Mercator (EPSG:3857) Not rated or not available Local Roads grandi Soil Rating Lines Background Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Aerial Photography distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015 Not rated or not available Soil map units are labeled (as space allows) for map scales 1:50,000 Soil Rating Points or larger. Α A/D Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012 В B/D The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Table—Hydrologic Soil Group (MOQ-05-09 A)

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	D	22.8	44.0%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	D	13.8	26.6%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	D	5.7	11.1%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	C/D	9.4	18.1%
So	Sloan silty clay loam, sandy substratum, occasionally flooded	B/D	0.1	0.2%
Totals for Area of Inter	est	,	51.9	100.0%

## Rating Options—Hydrologic Soil Group (MOQ-05-09 A)

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified

Tie-break Rule: Higher



#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

#### **Special Point Features**

(0) Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot \*\*

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area



Stony Spot Very Stony Spot



Wet Spot Other



Special Line Features

#### **Water Features**

Streams and Canals

#### Transportation

Rails ---



Interstate Highways

**US Routes** 



Major Roads

Local Roads

#### Background

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Morrow County, Ohio (OH117)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	1.2	7.5%		
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	8.6	56.0%		
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	1.2	8.0%		
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	4.4	28.5%		
Totals for Area of Interest		15.4	100.0%		

## **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic



Not rated or not available

Streams and Canals

Interstate Highways

Aerial Photography

#### MAP LEGEND

**Water Features** 

Transportation

Background

Rails

**US Routes** 

Major Roads

Local Roads

+++

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

#### Soil Rating Polygons

- 0 25
- 25 50
- 50 100
- 100 150
- 150 200 > 200
- Not rated or not available

#### Soil Rating Lines

- 0 25
- 25 50
- 50 100
- 100 150
- 150 200
- > 200
- Not rated or not available

#### Soil Rating Points

- 0 25
- 25 50
- 50 100
- 100 150
- 150 200
- > 200

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

### Table—Depth to Any Soil Restrictive Layer (MOQ-05-09 B)

Depth	to Any Soil Restrictive Laye	er— Summary by Map Unit	— Morrow County, Ohio (	(OH117)
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	99	1.2	7.5%
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	94	8.6	56.0%
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	86	1.2	8.0%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	>200	4.4	28.5%
Totals for Area of Interest		15.4	100.0%	

# Rating Options—Depth to Any Soil Restrictive Layer (MOQ-05-09 B)

Units of Measure: centimeters

Aggregation Method: Dominant Component Component Percent Cutoff: None Specified

Tie-break Rule: Lower Interpret Nulls as Zero: No

## **Hydrologic Soil Group (MOQ-05-09 B)**

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.



#### MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at 1:15,800. Area of Interest (AOI) С Area of Interest (AOI) C/D Warning: Soil Map may not be valid at this scale. Soils D Soil Rating Polygons Not rated or not available Enlargement of maps beyond the scale of mapping can cause Α misunderstanding of the detail of mapping and accuracy of soil line **Water Features** A/D placement. The maps do not show the small areas of contrasting Streams and Canals soils that could have been shown at a more detailed scale. В Transportation B/D Rails بنين Please rely on the bar scale on each map sheet for map C measurements. Interstate Highways C/D **US Routes** dilling the Source of Map: Natural Resources Conservation Service D Major Roads Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov ganggi Coordinate System: Web Mercator (EPSG:3857) Not rated or not available Local Roads grandi Soil Rating Lines Background Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Aerial Photography distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015 Not rated or not available Soil map units are labeled (as space allows) for map scales 1:50,000 Soil Rating Points or larger. Α A/D Date(s) aerial images were photographed: Feb 27, 2012—Mar 10, 2012 В B/D The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Table—Hydrologic Soil Group (MOQ-05-09 B)

	Hydrologic Soil Group— Summary by Map Unit — Morrow County, Ohio (OH117)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI	
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	D	1.2	7.5%	
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	D	8.6	56.0%	
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	D	1.2	8.0%	
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	C/D	4.4	28.5%	
Totals for Area of Inter	est		15.4	100.0%	

## Rating Options—Hydrologic Soil Group (MOQ-05-09 B)

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

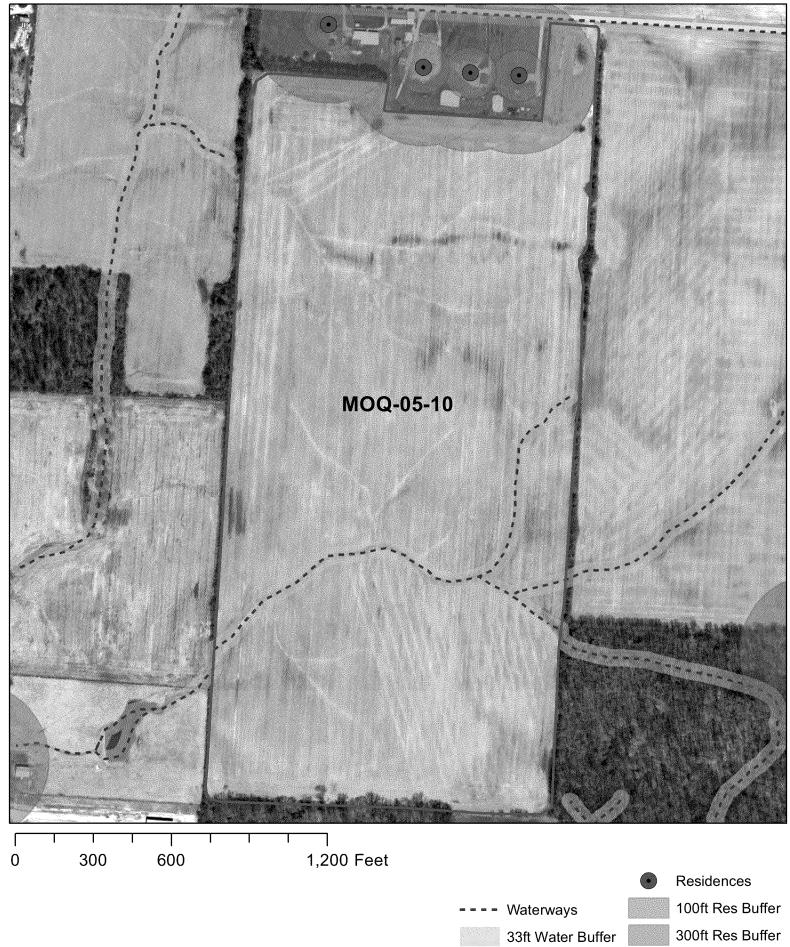
Tie-break Rule: Higher





# MOQ-05-10 Total Acreage: 84.5 Acres

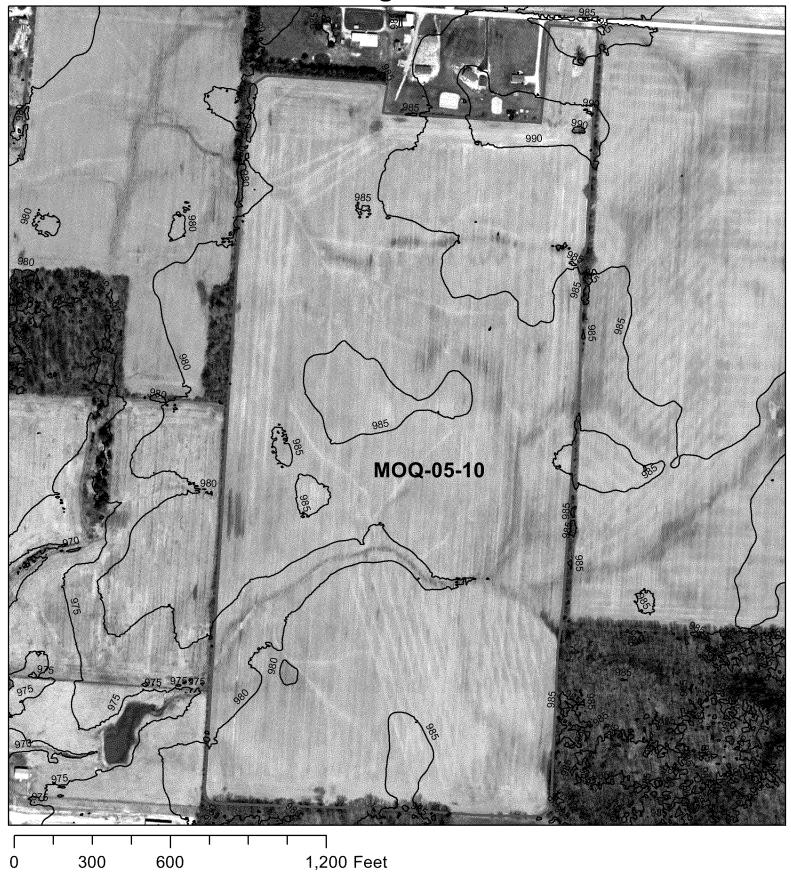






# MOQ-05-10 Total Acreage: 84.5 Acres







#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons



Soil Map Unit Lines



Soil Map Unit Points

#### **Special Point Features**

(0) Blowout



Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot \*\*

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area



Stony Spot



Wet Spot Other



Special Line Features

#### **Water Features**

Streams and Canals

#### Transportation

Rails ---



Interstate Highways

**US Routes** 

gattaggi

Major Roads Local Roads

#### Background

Aerial Photography

#### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

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Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Oct 5, 2011—Feb 3, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Morrow County, Ohio (OH117)					
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI		
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	24.8	29.6%		
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	0.2	0.2%		
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	39.8	47.6%		
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	18.9	22.6%		
Totals for Area of Interest		83.6	100.0%		

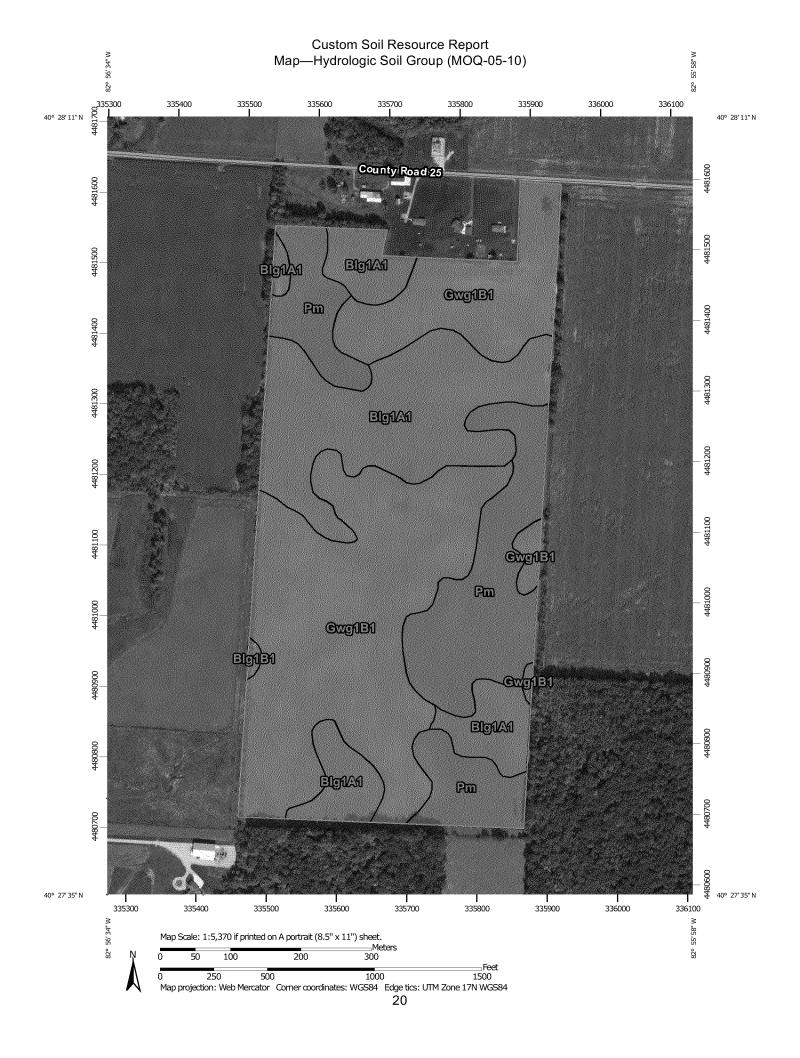
## **Map Unit Descriptions**

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Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

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#### MAP LEGEND MAP INFORMATION The soil surveys that comprise your AOI were mapped at 1:15,800. Area of Interest (AOI) С Area of Interest (AOI) C/D Warning: Soil Map may not be valid at this scale. Soils D Soil Rating Polygons Not rated or not available Enlargement of maps beyond the scale of mapping can cause Α misunderstanding of the detail of mapping and accuracy of soil line **Water Features** A/D placement. The maps do not show the small areas of contrasting Streams and Canals soils that could have been shown at a more detailed scale. В Transportation B/D Rails بنين Please rely on the bar scale on each map sheet for map C measurements. Interstate Highways C/D **US Routes** ALC: UNK Source of Map: Natural Resources Conservation Service D Major Roads Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov ganggi Coordinate System: Web Mercator (EPSG:3857) Not rated or not available Local Roads grandi Soil Rating Lines Background Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Aerial Photography distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. Soil Survey Area: Morrow County, Ohio Survey Area Data: Version 14, Sep 29, 2015 Not rated or not available Soil map units are labeled (as space allows) for map scales 1:50,000 Soil Rating Points or larger. Α A/D Date(s) aerial images were photographed: Oct 5, 2011—Feb 3, 2012 В B/D The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## **Table—Hydrologic Soil Group (MOQ-05-10)**

	Hydrologic Soil Group— Summary by Map Unit — Morrow County, Ohio (OH117)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI	
Blg1A1	Blount silt loam, ground moraine, 0 to 2 percent slopes	D	24.8	29.6%	
Blg1B1	Blount silt loam, ground moraine, 2 to 4 percent slopes	D	0.2	0.2%	
Gwg1B1	Glynwood silt loam, ground moraine, 2 to 6 percent slopes	D	39.8	47.6%	
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	C/D	18.9	22.6%	
Totals for Area of Inter	est		83.6	100.0%	

## Rating Options—Hydrologic Soil Group (MOQ-05-10)

Aggregation Method: Dominant Condition
Component Percent Cutoff: None Specified

Tie-break Rule: Higher